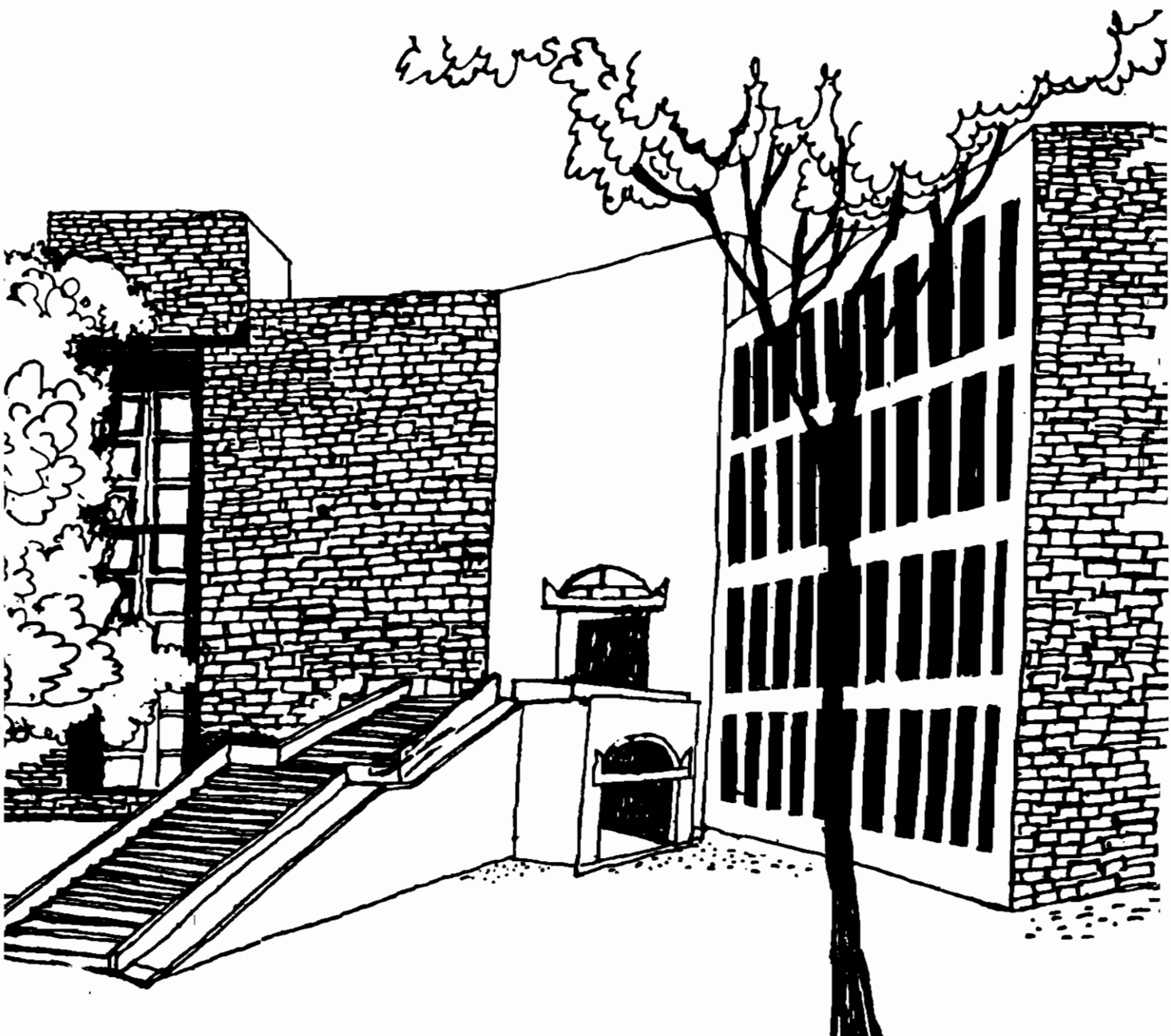
विद्याविनियोगाधिकारः

IIM

AHMEDABAD

Working Paper



Constraints to Export Growth in the Small Firm Sector

Sebastian Morris

Working Paper No. 98-08-06
August, 1998 1467

INDIAN INSTITUTE OF MANAGEMENT
AHMEDABAD 380015
INDIA

Constraints to Export Growth in the Small Firm Sector

Sebastian Morris
Professor of Economics
Indian Institute of Management. Ahmedabad
Ahmedabad 380015
INDIA

Exports from small firms are analysed and the constraints in expansion and growth of exports from the sector are brought out. A large primary survey of over 1200 firms is used to bring out experiences of small firms. Small firms would have to have a major role in exports from India , because only they have access to the unorganised labour market. Principally, macroeconomic policy especially exchange rate, tariff and credit policies have discriminated against the sector. The adherence to orthodoxy has resulted not only in considerable under-performance of the sector and its exports, but also of the economy as a whole. Relaxation of the institutional and policy constraints in the expansion of manufactured exports should have been the topmost priority, but given the continued reign of orthodoxy this is most unlikely. As such labour absorption by the sector would hardly be able to go much beyond 4% per annum, and the envisaged growth of the economy at rates of 7% or more is hardly likely

In the current context of a liberalising economy that is attempting to industrialise within the spaces provided by a world capitalist system. exports of manufactured goods is the key to industrial transformation. and especially so for a resource scarce and densely populated economy like India. The thesis that more open economies have grown faster than those less open. is stronger than what its very influential supporter (the World Bank) imagines. Small countries (in terms of population) tend to be more open than large. This is only natural. The deviation of actual openness from the structurally determined openness[1] explains growth in large panel data sets (across countries and time) better than any other variable. particularly in case of populous economies.

MANUFACTURED EXPORTS ARE STRUCTURALLY ORDAINED TO GROW, IF GROWTH IS TO BE SUSTAINED

Manufactured exports from India since the fifties have been at least. equal to if not in excess of manufactured imports. Today. the ratio of manufactured exports to imports is of the order of 1.3. And in consonance. the ratio of imports of natural resources to its exports is of the order of 1.5. In Korea. the ratio of manufactured exports to imports is around 4. and in Japan 6. China. despite its rather fortunate endowments of oil and non ferrous metals. has a ratio that is rapidly increasing and is already in excess of 1.7. It is only extreme poverty and slow growth over a long period (1965-1979) that has kept India's structural ratios from moving closer to the Korea's. Sustained growth of around 7 per cent per annum cannot be achieved[2] without a continuous rise in this ratio and in openness. the two being different facets of the same phenomenon. In short. India's manufactured exports need to grow at 20-22 per cent per annum in dollar terms for a GDP growth of 9 per cent. and at least 15 per cent for a GDP growth of 6-7 per cent. which is the government's target. This means that export growth from the small firm sector would have to be at least 18% p.a. This rate has been surpassed during the years that followed the structural adjustment - 1993-94 to 1995-96. It could have been maintained had it not been for short-sighted and

[1]Our own structural based model of openness leads to an explanation of the volume of trade, and why a few structural features - population, per capita income and land area - explain as much as 70 per cent of the variation in openness when panel data for about 130 countries over 25 years is used [3].

[2]We have argued elsewhere, that with wise exchange rate and trade and credit policy, 9 per cent per annum GDP growth may be an underestimate of what the economy is capable of. [5]

unimaginative macro-economic policy.

EAST ASIAN EXPORT POLICY IS NOT LAISSEZ-FAIRE

East Asian trade policy has been characterised by Bhagwati and many others as being closer to laissez-faire, since the ratio of the price of exports to imports (P_m/P_x) has been observed to be close to the international value. Yet the interpretation that export promotion is nothing but laissez-faire, with some incentives and sound macroeconomic policy, cannot stand up at all, either empirically or theoretically[3]. Simultaneous import substitution and export promotion denied by neo-classicals is actually possible in a three commodity model, so that P_m P_x = international values does not imply laissez-faire at all. Instead, in the east asian NICs it has meant that P_m/P_{ni} and P_x/P_{ni} >> *international price ratio*, so that these economies are more open than what they should have otherwise been. And the evidence that to achieve this they had underpriced their currency, after a modicum of diversification of their economies, by as much as 40 to 90 per cent is beyond doubt[5]. So export led growth is the simultaneous thrust given to exports and import substitutes. There is a progression of products from importables to exportables which came about due to many pressures (incentives, tax concessions, government fiat to exports, punishments for non-achievement of targets), and most importantly from large under valuation of currency. Under such policies, and with other conditions,[4] exports from NICs grew very rapidly. First, natural resource based exports grew, but their reign was too short lived, given the high population density and the resource scarcity of these economies. In the second phase, simple labour intensive exports grew very rapidly and this was a long phase. China is still in this phase. Under the wage increases brought about by the rise in exports and the overall high growth, (which in less than 10 years in Korea, absorbed all disguised unemployment), the competitiveness of labour intensive goods naturally declined. What were earlier importables - capital and scale intensive goods - emerged as important exports. In the fourth phase (Korea has just entered into this) and Japan is in the middle - differentiated and Schumpeterian industries dominate the export sector. This has been described and conceptualised by Ozawa[6,7] and Kojima and Ozawa[2]. In India, the severe bias against tradeables, and especially exports, was a feature of the economy from the Mahalanobis plan right until the end of the eighties[5]. (There may have been a weakening in the mid-eighties in some sectors). This has prevented any such phased development of the tradables sector.

EXPORTS DO RESPOND HANDSOMELY TO PRICES

With the liberalisation in trade and the depreciation, the bias against the exports was to a large extent corrected and Indian exports (especially from the small sector), responded handsomely (perhaps the best response anywhere in the world) and exports grew at rates close to 20 per cent in dollar terms. This debunked the myth that exports from India are not responsive to price incentives.

THE VAST POTENTIAL IN MANUFACTURED EXPORTS

The long period of import substitution, with a severe bias against exports, was not without its 'merits' (side effects). Competencies (which no doubt need to be honed) developed in nearly all sectors of the economy, so that, today, India has perhaps the most diversified industrial sector among all developing economies. Indeed, in terms of skills and competencies, including some areas of high-technology, the Indian economy is ready for a export boom, that could put to shame the East-Asian cases, if the correct macroeconomic policies are in place, and a few important constraints are

[3] See [5] for the detailed arguments

[4] Especially agriculture growing at rates in excess of 4.5 per cent due to the institutional constraints being relaxed via land reforms.

[5] So severe was the bias against exports, in the import-substitution of the Mahalanobis Plan (due to the lack of compensating currency devaluation) that India's exports of textiles, for instance fell from a world share of 15% or more to nearly 1% in about five years.

relaxed. What this means is that industrial expansion at high rates is not likely to result in a skill constraint and the capacity of the industrial system to absorb imported technology is very large, if the current constraints are relaxed. Export expansion at rates around 20 per cent is very much dependent upon macroeconomic policies, especially the exchange rate and credit - particularly export credit. The influence of macroeconomic policy in the exports from small firms is very strong. The evidence is very robust[6]. Given the fact of vast disguised unemployment, it would be (functionally and historically) necessary that those items that use labour more intensively show maximum growth in exports. The advantage of competencies created in high-tech and skills and capital intensive industries, implies that they too could, in particular industries, grow rapidly, though the dominant sector would be labour using. One may go so far as to say that the fact that today India has a disproportionately large share of exports of technology intensive manufactured goods and services, as also *traditional* labour intensive goods, is due to the distortions, that did not allow comparative advantage to find expression. It is largely 'absolute' advantage based products, and at the margin competencies based products which do not critically depend upon factor costs, that constitute India's basket of exports. The need of the hour is to correct this anomaly, to release the potential of the economy for export led growth. Small industry (the modern small firms) would have to (and this is historically determined) play the key role in this transformation.

VITAL ROLE OF SMALL FIRMS IN MANUFACTURED EXPORTS

Why should small firms rather than the large firms play the lead role in the expansion of manufactured exports? The answer lies in the schism in the labour market and the industrial structure that it has spawned. It is the small firms that have access to the competitive labour market, where labour is docile and is available at market wages. For large firms access to this labour is only indirect via subcontracting, jobworking, contract production etc. So expansion of exports of the labour intensive variety (where the comparative advantage of India at this juncture lies), would not be easy for large firms, if they were to have in-house manufacturing. The highly organised labour force they face, which has, as yet, not entirely accepted wage linkage with productivity, would hardly give the edge to Indian large firms against those located in the NICs, not to speak of China. In China, a near homogenous labour market allows large Chinese and other firms to have in-house production of labour intensive activities. In this sense, India is sharply distinguished from China and the NICs. Japan, in the immediate post war period, may have been less distant to India in this regard. The success of Japan as an export power house in the first decades of the fifties and sixties depended upon the access to the unorganised and cheaper labour market via small firms. Hierarchical networks which subsumed subcontracting ensured the continued access to low cost labour, as skill intensive exports emerged.

EXPORTING FIRMS ARE MORE EFFICIENT, AND DIFFERENT

Out of our sample of 1212 firms, 182 are exporting firms and are known to be so[7]. As many as 806 firms are known to be non-exporting. The status of the remaining is not known because the firms themselves did not know whether their products were being indirectly exported. In terms of numbers, exporting firms constitute 15 per cent of the sample, but in terms of turnover close to 30 per cent. The employment, turnover and machinery per person in these firms on an average, are larger than for the non exporting firms. There are some largish firms in the exporting category. In the sample no firm with employment greater

[6]The additional policy factor of reservation which may have denied the entry of large firms in sectors that used labour intensively is less important. Textiles is the significant exception though.

[7]This Survey was carried out as part of a larger study for the Government of India [4]. We are grateful to the Government of India for having sponsored the study. The present paper owes much to this study.

than 125 is not exporting This is definitional, since government had raised the plant and machinery limit for small firms from Rs.75 lakhs to Rs. 3 crore for leather and garment units, and firms with employment in excess of 100 would rarely fall outside this category. We have included a few (new) firms with plant and machinery in excess of Rs. 3 crore and going up to Rs 20 crore, to capture the upper end of the small firm sector, since Rs.20 crore today could be comparable to Rs.3 crore, say 10 years ago.

Both the literature on export oriented growth, and the actual empirical findings of East Asian success stories emphasise the great positive externalities of exports In a Granger-Simms/ Akaikie framework, causation studies that have examined the issue of whether growth causes exports or exports cause growth, have shown mixed results. This is not surprising since in these large cross sectional and panel data, the direction of causation would depend upon the nature of the data - whether it is monthly, annual or quarterly. It would also depend upon the mode of collection of information. In the short period, macroeconomic relationships would rule, rather than the more 'micro-economic' positive feedback effects; that emerge from learning by doing, scaling up, technological changes, and absorption of 'idle' labour, and 'spill-over' effects through the rest of the economy.

Our first observation is that exporting firms are significantly more efficient than non-exporting firms. We have used a measure of value added that is based on the responses of firms and checked for major under reporting of turnover. Value added is crudely estimated for each firm as :

$$y = (AvgMonthlyWageRate)*(NoOfEmpl)*12/105 + (SalesMargin)*(Turnover)/100$$

The monthly average wage rate is in rupees and the turnover and value added in Rs. lakhs. The turnover figure could in some cases be misreported (the tendency being to under report the same[8]. But this we feel could not have been significant, since we did check with other measures of turnover based on cost data, and overall physical turnover.

The total number of employees including the entrepreneur, unadjusted for quality) is ***(L)*** and the value of plant and machinery used ***(K)***. The stock data were not particularly reliable, when cross checked with the working capital turnover cycle and turnover, so we decided to use the value of plant and machinery. Being an administrative category, most entrepreneurs were well aware of the value of plant and machinery. As far as possible the actual plant and machinery values rather than figures given to government officials were specifically asked for. To allow for wage rate variation across firm sizes in general, a translog production function which allows for imperfection in factor markets, to which firms adjust, has been used.

The results of regressing *log (Y)* on *log (L), log (K), log(v) [log(Y)]2, [log(K)]2* and *log (L)* log (K)* with an export dummy are reported in Table 1. Note that exporting firms have significantly higher value added, so they are more

Table 1: Regression Results for Log(y) with Exporting and Status Not Known (Dummies) as Independent Variables

Independent variable	Coefficient	t-value
constant	-1.2157	-8.0096
log(k)	0.2825	7.5426
log(l)	1.0468	9.8588
0.5*log(k)*log(k)	0.0198	1.8148
0.5*log(l)*log(l)	-0.0099	-0.2649
log(k)*log(l)	-0.0366	-2.3312
Exporting	0.3489	5.7327
Status not known	-0.0996	-1.8411
R-sq adj.		0.7683
No of Observations		1099
F-number		521.1

[8]Special care was taken in the survey to dissociate ourselves from the local government authorities and impress upon the respondents that in no way would the information on sales be

efficient than non-exporting firms.

Using a neoclassical TFP measure (based on a Cobb-Douglas production function), relative to an artificially constructed aggregate firm[9], we see that the relative TFP of the exporting firms is higher than that of the non-exporting and other firms. The average relative efficiency is higher. (See Table 2). From the same Table, we also see that better efficiency arises due to significantly larger sales than due to higher margins. The possibility that this higher sales may be due to an industry effect (i.e., because exporting firms happen to be in such industries where the sales per firm tend to be higher) is rejected by regressing sales per firm on the export dummy and dummies for a 2-digit[10] industry classification. This exercise shows that the 2-digit industry dummies do not capture the variations in sales. The results are not reported. Instead the strength of the export dummy is significant and the t-values are about the same as without the industry dimensions.

Table 2 Partial and Other "Efficiency" of Exporting and Not-Exporting Firms

	Gross margin/value of plant and machinery		Value added per unit of plant and machine		Value added per employee (Rs lakhs)		Neoclassical TFP ratio relative to combined firm		Relative Efficiency* assuming one implicit market		Sales growth 1995-96 over 1991-92 (% per annum)	
Not-exporting firms	2 890	764	5.349	738	0.597	749	1 897	738	-1 312	738	19 823	721
Exporting firms	2.856	170	4.553	166	1 197	170	2 457	166	-0 506	166	21 643	154
Other firms possibly exporting and not known	2.620	217	5.657	196	0 499	196	1.229	196	-1 623	196	17 574	208
All firms	2 834	1151	5.284	1110	0.671	1115	1 862	1110	-1.246	1100	19.768	1083
Data not avail for		61		112		97		112		112		129

NB: The second column for each item gives the number of firms used for which the relevant data was available.

But on margins, the industry effect is somewhat strong and the export effect is just perceptible. The dummy for the category of firms that are "not surely either non-exporting or exporting" (not known/missing), despite the industry effect, does capture the part of the variations in margins. Margins are generally lower for such firms.

The percentage of the sales to export houses is also a significant determinant of efficiency. (See. Table 3). Thus, exporting firms are significantly more efficient than other firms is an inescapable conclusion. Our analysis based on a single variable does not tell us why and how exporting firms are more efficient[11]. We have shown that sales is more important than higher margins, higher margins holding up only weakly if the industry effect were to be taken into account.

divulged to government. In this context the enumerators were trained to put the respondents at ease.

[9]A firm equal to the sum (simple aggregation) of all firms in the sample

[10]Two rather than 3-digit level of industry is relevant for the task on hand, since the 3-digit level is too detailed, and some of the industries, for example, in textiles, processing of rubber, metal working and coating are defined keeping in view the size-organization of industry.

[11]A multivariate analysis would throw a better light on this issue, despite the more than usual care that is required in the interpretation of the results.

Response to another question *"Are you planning to start exports or to substantially increase your exports?"*, also confirms the same picture, and suggests that not only exporting firms but those seriously contemplating exports are more efficient than others. (See, Table 4)

The sales growth of exporting firms too has been significantly higher than for non-exporting and other firms. When we add sales growth (per cent compounded annual growth in sales over a five year period immediately preceding 1997) along with the export dummy, the significance of the export dummy remains, despite the sales growth variables being also significant; although the direct effect (coefficient) reduces. (See, Table 5).

That efficiency in exporting firms arises due to larger scale of operations is explained by the reduction in the coefficient though vastly still significant, when the geographical range of sales is introduced as an independent variable. It suggests that as firms strive to increase sales, given the price incentives to do so, the expansion (the kind of products involved are quantity adjusting) enhanced efficiency results. (See, Table 6).

EXPORTS AND THE CHANNELS OF EXPORTS

Due care was taken in the sampling to ensure that the exporting firms were distributed over the various distinct channels of exports. From Table 7, where we report on channels, we notice that we had only 10 firms which had their channels in international subcontracting/buy back, etc. Direct exports among the larger of the small firms dominates the exports from the modern small sector, and indirect exports via trading/export houses is the dominant channel for the smaller firms, especially those in the traditional sector. This is not reflected in the data and Table 7, since our purpose was to have at least a few firms from the category "sales to foreigners/buying agents in India" and "international subcontracting."

Table 3 Regression Results for Log(y) with Proportion (%) of Sales to Export Houses as Independent Variable

Independent variable	Coefficient	t-value
constant	-1.2810	-8.4385
log(k)	0.2826	7.5195
log(l)	1.0796	10.1249
0.5*log(k)*log(k)	0.0207	1.8838
0.5*log(l)*log(l)	-0.0165	-0.4402
log(k)*log(l)	-0.0341	-2.1578
Proportion of sales to export houses	0.0069	4.9751
R-sq adj		0.7652
No of Observations		1098
F-number		596.8

INCENTIVE FOR EXPORTS ARE MARGINAL

Direct exporters tend to be larger than others. This means that direct export is the preferred channel once the firm is able to have a significant volume of sales to justify exports on own account. Price advantage in export sales over domestic sales tend to be higher in these as compared to the other channels. (See, Tables 7 and 8). This may well mean that the currency depreciation brought about as part of structural adjustment and the opening up of the economy to foreign capital and transnational activity, including those of subcontractors, may have begun to act, to lay the beginnings

Table 4: Regression Results for Log(y) with Not Planning to Export /Not Greatly Increase Export as Independent Variable

Independent variable	Coefficient	t-value
constant	-1.0708	-6.1931
log(k)	0.2643	6.7788
log(l)	1.0808	9.6005
0.5*log(k)*log(k)	0.0171	1.5072
0.5*log(l)*log(l)	-0.0220	-0.5690
log(k)*log(l)	-0.0265	-1.6401
Not planning to export/ not greatly increase export	-0.2682	-5.6061
R-sq. adj.		0.7739
No of Observations		964
F-number		550.5

for scale and comparative advantage based firms that respond to price incentives and demand via enlargement of the scale of output But what may have happened may not be sufficient The margins that firms enjoy in exports over domestic sales tends to be very low, around 1.5 to 4 per cent. and is still lower in contract and indirect sales. ***Perhaps the most important conclusion is that whatever be the channels of export, there is as yet no strong positive bias acting to shift resources to exports in a significant way*** It is almost certain that the recent appreciation of the real value of the rupee would have led to the small positive bias on price of the order of 5 per cent. and about 2 per cent on margins, to have vanished. The appreciation in the real value of the rupee has been around 15 per cent. It is no wonder that recently (in 1997-98), exports from the sector have declined sharply.

That the relative margins ratio is lower in all groups as compared to the relative price ratio, suggests that we are witness to an equilibrium situation where the sector had already adjusted to the positive thrusts provided in the early phase of the structural adjustments, so that at the time of the survey, no force was acting to keep export growth at a significantly higher rate than overall industrial growth. (See, Table 7 and 9).

In contrast, in countries like Taiwan and Korea, the bias for exports, in terms of price or value added, may have been as high as 3 : 1 or 1.5 : 1 for periods as long as 10 years[1].

From Table 10, it is obvious that relative to non-exporting firms, whatever be the channels of exports, exporting firms are more efficient than non-exporting firms, pointing to the well recognised role of the discipline imposed by international markets.

CONSTRAINTS AND DIFFICULTIES THAT SMALL FIRMS FACE IN INCREASING EXPORTS

Firms were asked as to what they needed to do to greatly expand exports or to start exports; their responses have been tabulated in Table 11, bringing out their relative importance. Notice that the most important thing that firms thought they needed to do was to increase the scale of their output by investing more. The factor is relatively stronger for exporting firms implying that the experience of exporting brings them to a point, where further exporting calls for investments in scale economies. This is in keeping with our conceptualisation of a step like movement up the scale economy ladder that sustained exports require. Non-exporting firms sense an acceptance problem and a quality problem, which is reflected in their higher rating for packaging and quality improvement. The need for tie-ups with MNCs/foreign groups becomes a little more pronounced with the experience of exporting. More importantly, whereas exporting firms see export houses to be less important, non-exporting firms see them as inevitable. We see in this an inadequacy on the part of Indian export houses to forge the long term and mutually beneficial, and fair relationships, with exporters.

Table 5 Regression Results for Log(y) with Exporting Status and Growth in Sales as Independent Variables

Independent variable	Coefficient	t-value
constant	-1.2077	-7.4499
log(k)	0.2925	7.2946
log(l)	0.9998	8.6515
0.5*log(k)*log(k)	0.0201	1.7095
0.5*log(l)*log(l)	0.0142	0.3401
log(k)*log(l)	-0.0441	-2.5481
Growth in sales	0.0012	4.8195
Exporting firm	0.3393	5.2541
Status not known	-0.0775	-1.3949
R-sq adj		0.7736
No of Observations		1003
F-number		428.9

The need to improve quality remains important. This implies that either Indian exporters do not have the cost advantage to enter into highly price elastic markets, which may not value quality too highly, and/or that their

production processes are intrinsically unable to deliver to standard specifications or the right quality. We suggest that it would be more the former, since quality and specifications are not entirely separable, and the need to introduce foreign specifications has been given much importance.

WHAT COULD GOVERNMENT DO TO SPEED UP EXPORTS?

The most important thing that it can do would be to provide more working capital. Credit related actions score close to 30 per cent of the points in the case of exporters. Exporting firms rate the credit constraint to be far more important than others. All the industry associations vehemently told us about banks cutting of/drastically reducing their credit, even pre and post shipment credit. In almost every interview with exporting entrepreneurs, questions about credit evoked much emotion and anger. To them it seemed that the government policy was stupidly pulling back with one arm what it was attempting to promote with another[12]. (See, Table 12).

The provision of marketing support looms large as one of the things that government could do for non-exporting firms, but its importance falls for exporting firms. This indicates that the experience of exporting and marketing tones down firms' perception of what government can do in the marketing function. More objectively, given the nature of marketing and the efficient organisation which it calls for, for manufactured goods it is highly unlikely that a slow moving bureaucracy could in any effective manner provide marketing support on a regular basis.

We posed this issue among smaller groups within industry associations, and with groups of entrepreneurs, explaining the difficulties in government action on a regular basis - that the costs would be too high, and any positive effect would come only with much subsidy and expense. Most agreed but claimed that if governments can spend money on handicrafts and handloom textiles, it could certainly do so for SSI products in general. We interpret this cry and plea of entrepreneurs as reflective of their potential to produce goods cheaply, and of the inherent difficulties in selling. In other words, the need for the institutional and policy changes that lead to more efficient linkages between small and large is pressing. Only then can the small firms' potential be realised. Thus, we have come across many cases of good products including new and improved products being made by small firms, but with very small markets, and confined geographically.

Table 6: Regression Results for Log(y) with Extent of the Market, Exporting and Status Not Known as Independent Variables

Independent variable	Coefficient	t-value
constant	-1.2133	-7.9869
log(k)	0.2726	7.2580
log(l)	1.0309	9.6531
0.5*log(k)*log(k)	0.0193	1.7738
0.5*log(l)*log(l)	-0.0126	-0.3380
log(k)*log(l)	-0.0345	-2.2025
Exporting firm	0.2140	2.5402
Status not known	-0.1180	-2.1737
Sales state wide	0.0732	1.4024
Sales nation wide	0.1579	2.7919
Sales internationally	0.2976	2.6542
R-sq. adj.		0.7711
No of Observations		1093
F-number		369.0

Import duties and excise duties with their obvious and deleterious effects on exports can be easy target of government action. Similarly, infrastructural constraints like shipping services. The development of ports, speeding up of customs clearance, and improvement in shipping frequencies do not seem to be very important factors. This

[12]The working sub-group of the Ninth Plan on exports brought out in a more detailed manner the credit constraints and the shameful experiences with bank managers that many an entrepreneur exporter with a solid business, and orders on hand, had to go through.

can be misleading, because most exporters do not deal with customs/ports and ships. Large exporters, export houses and large firms usually do.

Among those exporters who directly export, the relative importance of supply side constraints' almost doubles, so that there is much scope for government to improve the performance of ports and customs.

The reduction in import tariffs, the tariffisation of quotas that constituted the first phase of the liberalisation, served first and foremost to bring down the "water in the tariff". To that extent, there was a little opposition and the overall reduction in tariffs had a salubrious effect on the competitiveness of Indian production. That it was accompanied by a 20 per cent depreciation of the currency helped the real sector enormously[13]. Unfortunately, in the next phase as the tariffs were lowered further, the political pressures, especially from the public sector, and inefficient producers of such bulk materials, as plastics, rubber and basic chemicals, steel, copper, and other non-ferrous metals, paper etc., forced government to keep the rates of tariffs on them high. Indeed, higher than in most manufactured goods, except final consumer goods. This inverted tariff structure ensured that steel, coal, etc. were protected nearly as much as they were before, while in many manufactured goods a negative effective protection rate ruled. This phenomenon, of an inverted tariff structure has been creeping up right through the eighties. The non-electrical machinery sector which was the target of study by the World Bank[8] brought out that the DRCs/ EPRs in many products/segments of the industry showed little or no protection.

Table 7: Channels of Exports and Certain Features of Small Firms

Export channel	Value of plant and machn (Rs lakhs)	Turnover (Rs lakhs)	Employment	Sales growth (% per annum)	Price realisation ratio	Margin realisation ratio
Direct exports with own L/C	86.00	307.61	50.55	20.87	1.0511	1.0389
	90	89	91	76	91	66
Direct exports with L/C by agent	24.02	306.83	42.68	23.19	1.0532	1.015
	28	28	28	22	28	16
Indirect exports via export/trading houses	14.50	171.19	19.00	15.73	1.0262	1.0157
	33	35	36	31	36	35
Exports through foreign buying agents/houses in India	22.55	142.13	24 13	18.32	1.035	1.026
	16	17	16	15	17	15
Other (incl international subcontracting)	34.64	127.94	17.20	15 19	1 1463	1.025
	10	10	10	10	10	8
All exporting firms	54.21	255.06	54.14	21.64	1.0491	1.0276
	177	179	181	154	149	140
All firms	19.86	27.51	27 51	14.74	NA	NA
	1195	1209	1209	1083	NA	NA

NB. Figures in the second row give the number of firms for which the relevant information was available. The total number of exporting firms is 182, and the overall sample size is 1212)

[13] [5] has argued that the structural adjustment of 1990-91 may not have required an expenditure reduction programme. A deeper expenditure switching could have done the job.

The high excise duties on many intermediate goods - petroleum, plastics, paper, non-ferrous metals and steel, constitute another major stumbling block for the reduction in import duties, and most importantly, for correcting the inversion in the tariffs Computer manufacturers brought to per cent of the duty paid in the case of the Jamnagar brass parts manufacturers. The matter is no different for the bulk of the firms in the small sector Small firms using labour more intensively and being material intensive too, would be most adversely affected by the inverted tariffs

Table 8 Channels of Exports Used by Firms and Price Realisation, Distribution of Firms Over

(No of Firms)

		Data on price avail for	Less than domestic	Same as domestic	10% higher	11-25% higher	25 to 50% higher	>50%
Direct exports with own L/C	91	72	14	25	19	10	2	2
Direct exports with L/C and formalities by an agent	28	19	5	5	3	4	2	0
Indirect exports via export /trading houses	36	34	8	14	7	4	0	1
Sales to foreign buying agents in India	17	16	2	7	5	2	0	0
Other such as international subcontracting: buy back etc	10	8	3	1	1	1	0	2
Information available for	182	149	32	52	35	21	4	5

NB: Not known /possibly exporting indirectly incl missing cases 224,Not exporting firms 806; All firms 1212

the attention of the government such anomalies, which were to a certain extent have been corrected. But small firms with little skills, and not having the organisational capacity to lobby, or use and present formal analysis and economic studies, have been badly affected. The capital good sector is another where we have the ridiculous situation (often pointed out to the government) of duties on import of steel and materials being of the order of 50 per cent, while some of the outputs attract less than 20 per cent.

The duty drawbacks even when properly administered do not really address the issue, and our estimates based on a few case studies and discussions with a group of entrepreneurs and industrial associations reveal that there are huge costs of delay, of multiple visits, of the need to grease the palms of the officials and inspectors. The net benefit of duty drawback (50 per cent duty on imported brass waste) allowed for exporters, after including costs as above was less than 10

Consider a typical case of a small firm which adds value to the extent of 20 per cent at domestic prices, and pays a duty of 50 per cent on its inputs Without duty drawback and ignoring the small amount of material (and energy) inputs which may be non-tradable, we get the effective protection to be:

$$EPR = v / \{1 - t_o - (1-v)(1 - t_m)\}$$

where v is the proportion of output that constitutes value added. t_o is the tariff on output and t_m on inputs. In the case of Jamnagar brass parts cluster, we get an EPR of approximately 50 per cent, which means a discrimination against the activity.

The notion of effective protection does not adequately capture the bias against tradable goods production More than all stakeholders in the firm, it is the owner/entrepreneur, who makes decisions He is concerned about profits and surpluses, so the reaction of firms to relative price shifts, as between tradables and non-tradables, and it is better captured by the ratio of profit at international prices to profit at domestic prices This, for want of a better term, we may call the effective incentive rate (EIR). This ratio would be far more responsive and would more correctly capture the change in the incentive structure or tariffs and exchange rate changes. Unfortunately, economists, in treating all stakeholders as equivalent, conventionally use the EPR If we are interested in the response of the entrepreneur, then the EIR is a more valid indicator.

'Inverted tariffs' are particularly harsh on small firms, since they are more labour using and have high material to output ratios. Industry circles have not generally highlighted this bias In contrast, issues such as reservation, excise duty concession, the definition of SSI, which are somewhat less important, have attracted much attention For an economy that was long protected with absolutely high tariff levels, the idea of EPR or EIR is still new. Even large industry circles are not particularly adept at discussing the status of their industry in these terms The small firm associations which tend to be much more disorganised and less analytical, and more rhetorical on the issues that concern them, have sadly missed this important discrimination against the sector

An extensive study of EPRs for the product-markets and activities in which small firms are dominant is the need of the hour.

Table 9 Channels of Exports Used by Firms and Margins on Export Sales, Distribution of Firms Over

(No of Firms)

	All exporting firms	Data avail for	Lower than domestic sales	About the same	About 10% higher	11-25% higher	>25%	Can't say
Direct exports with own L/C	91	70	14	21	20	7	4	4
Direct exports with L/C and formalities by an agent	28	20	4	7	3	1	1	4
Indirect exports via export/trading houses	36	35	8	15	7	4	1	0
Sales to foreign buying agents in India	17	15	3	7	3	1	1	0
Other such as international subcontracting, buy back etc	10	8	3	2	2	0	1	0
Information available for	182	148	32	52	35	13	8	8

NB. Not known /possibly exporting indirectly incl missing cases 2244, Not exporting firms 806; All firms 1212

'EQUILIBRIUM' PRICING OF RUPEE PUTS OUT INDIA AS A LOCATION FOR INTERNATIONAL SUBCONTRACTING

The bias against local manufacturing (even during the heydays of protection) is amplified by the 'equilibrium' pricing of the rupee. Tariff distortions (specifically the inversion in the tariffs) would have been less important if the Indian government via its macroeconomic policies had not chosen to hold on to the 'equilibrium' price of the rupee. Today the rupee has been held up via capital inflows[5]. In other words, the capital account, specifically capital inflows, have been allowed to determine its value.

In contrast, nearly in all the success stories of manufactured exports growth from East Asia, the economies have underpriced their currency far below the equilibrium rates: China (close to 90% underpricing), Korea, Thailand, Taiwan, Malaysia and Indonesia (between 40 and 60%)[5] This aggressive pricing in a skill and labour surplus economy can make for high speed growth with vast increases in manufactured goods exports, which in India's case would mean expansion of the small sector. Expansionary monetary and fiscal policy that leads to currency fall, enhanced credit to the sector, removal of the invasion in the tariffs, improvements in legal procedures for loan recovery, and overall growth enhancing policies are the keys to this transformation.

REFERENCES

[1] Amsden, Alice, *Asia's Next Giant - South Korea and Late Industrialisation*, (1988), New York, Oxford Univ. Press

[2] Kojima, K. and T. Ozawa, "Towards a Theory of Industrial Restructuring and Dynamic Comparative Advantage", *Hitotsubashi Journal of Economics*, Vol.26, No.2, (Dec. 1985), pp 135-145

Table 10: Regression Results for Log(v) with Exporting Channels (Dummies) as Independent Variables

Independent variable	Coefficient	t-value
Constant	-1.1902	-6.9023
log(k)	0.3092	7.1017
log(l)	1.0231	8.5578
0.5*log(k)*log(k)	0.0187	1.4430
0.5*log(l)*log(l)	0.0031	0.0755
log(k)*log(l)	-0.0474	-2.6358
Own L/C	0.4047	4.8816
Own L/Cs through agent	0.3405	2.4609
Trading/export houses	0.3064	2.5170
Foreign buying agents in India	0.3741	2.0526
Other firms	0.242653	1.0706
R-sq adj		0.7582
No of Observations		903
F-number		283.8000

Table 11: Relative Importance of Firm Level Actions (Employee and Turnover Weighted Scores)

	Not Exporting Firms		Exporting Firms		Other's perhaps exporting or export status not known	
	Employee weighted	Turnover weighted	Employee weighted	Turnover weighted	Employee weighted	Turnover weighted
Lower costs of production	5.68	4.87	5.46	5.19	4.19	10.65
Invest to increase scale of output	17.75	14.08	34.58	32.64	13.79	16.27
Improve quality	24.94	28.17	21.68	27.38	39.22	30.52
Improve packaging	9.78	12.84	7.79	9.97	10.22	9.36
Tie-up with MNCs/foreign groups	12.69	9.62	14.63	11.19	12.11	14.05
Tie up with export houses	12.35	17.42	3.69	3.58	8.84	4.64
Shorten delivery schedules	3.00	4.69	4.51	3.99	2.68	1.81
Introduce foreign specifications	13.80	8.30	7.66	6.06	8.94	12.70
All actions	100.00	100.00	100.00	100.00	100.00	100.00

NB: The scores are based on the response to the question: "What do you need to do to either start exports or to substantially increase your exports?". The scores are adjusted for multiple responses and weighted for both employees and turnover.

[3] Morris, Sebastian. "Structural Determinants of the Openness of Economies The Conceptual Basis and Cross Sectional Evidence", (1994). International Economics Workshop Univ of Pennsylvania.

[4] Morris, Sebastian, Rakesh Basant, K Das, Abraham Koshy, and Kavil Ramachandran. "Overcoming Constraints to the Growth and Transformation of Small Firms", (Nov 1997). Indian Institute of Management, mimeo

[5] Morris, Sebastian. "Why Not Push for 9% Growth Rate". *Economic and Political Weekly*, Nos 20 and 21, (May 17-24, 1997), pp 1153-1166

[6] Ozawa, Terutomo. "On New Trends in Internationalisation. A Synthesis towards a General Model", *Economic Notes*, Vol.0, No.1, (1985), pp.5-25

[7] Ozawa, Terutomo, "International Transfer of Technology by Japan's Small and Medium Enterprises in Developing Countries", mimeo. (July 19, 1985), Geneva, United Nations, UNCTAD.

[8] World Bank, "Non-Electrical Machinery Sector: India", Industrial Economics Division, (1984), New Delhi, World Bank, mimeo.

Table 12 Relative Importance of Govt Actions/Policy in Enhancing Exports from the Sector

	Non-Exporters	Exporters
Lower import duties on raw materials	16.23	7.84
Lower excise duties on output	5.17	6.21
Provide more export related credit	11.75	22.49
Improve the terms for export packaging credit	3.26	5.11
Improve physical infrastructure	8.73	6.73
Reduce delays in port and customs clearance	8.64	7.81
Reduce export formalities	13.36	15.50
Provide marketing support	17.56	13.56
Arrange fairs and exhibitions	12.53	9.32
Improve shipping frequencies	1.08	2.41
Others of a special kind	1.67	3.03
All actions	100.00	100.00

NB. These are based on response to the question "To greatly expand your expands or for you to start on exports, what could the GOVERNMENT do?". After normalisation for multiple responses, they have been employee weighted. The intensity of those already exporting (number of items ticked) is almost three times that of non-exporters intending to export